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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/711,524	11/14/2000	Chin-Sung Liu	4504-017	7156

31838 7590 06/26/2002

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EXAMINER

MULLINS, BURTON S

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 06/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/711,524

Examiner

Burton S. Mullins

Applicant(s)

LIU ET AL.

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 November 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

1. Figures "1-3" [sic] should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: Figs.3(a)-3(e) have numerals 31-37 and 331-334 which are not mentioned in the description. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:

Figs.4A-4C, Figs.5A-5E are referred to throughout the specification but are not included in the application. Are the figures as filed mis-labeled, or are these figures actually missing? Seven drawing sheets were filed originally, so it appears the figures are mis-labeled.

Figs.1-3 are referred to as showing conventional coil arrangements (p.2, line 4). Does this include Figs.1(a)-1(c1/2), Figs.2(a)-2(c) & Figs.3(a)-3(e)? It is not clear what drawings are the prior art and what drawings show the invention. Further, under "Brief Description of the Drawings" section, each individual drawing must be described.

Numerous reference numbers in the specification are not clear. For example, numerals 30 and 31 are said to refer to "arrows" (p.7, lines 1-2), but in Fig.3(a) reference number 31 does not appear to be an arrow; numerals 213 and 214 are referred to as "homopolar parts" (p.8, line 2), but are nowhere to be found in the drawings. Further, reference numbers 50+ (p.8) are not shown in the drawings, perhaps because Figs.5A-5E are missing.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.


Claims 1-26, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Nakao et al. (US 5,939,804). Nakao teaches an electromagnetic actuator for moving an object (a lens) along a first direction X and a second direction -X, comprising: a magnetic force line generator including two homopolar parts (magnets/yokes 5a/6a and 5b/6b; Fig.2) spaced with a clearance small enough for generating magnetic force lines (Fig.6) including a first substantially linear portion and a second substantially linear portion (Fig.6) due to a repelling force between said two homopolar parts; a first actuating coil set (that part of coil 9 in "magnetic circuit" 8a; Figs.1-2) connected to said object and arranged around said magnetic force line generator with a coil wall thereof substantially perpendicular to said first substantially

linear portion for moving said object in said first direction, i.e., the X direction, in response to a first current density therein and said magnetic force lines; and a second actuating coil set (that part of coil 9 in second "magnetic circuit" 8b; Figs. 1-2) connected to said object (a lens) and arranged around said magnetic force line generator with a coil wall thereof substantially perpendicular to said second substantially linear portion for moving said object in said second direction, i.e., in the -X direction, in response to a second current density and said magnetic force lines.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is 305-7063. The examiner can normally be reached on Monday-Friday, 9 am to 5 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are 305-1341 for regular communications and 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0956.


Burton S. Mullins
Primary Examiner
Art Unit 2834

bsm
June 24, 2002